

## APPENDIX E

# PRACTICE EXAM

1. Breeding or selecting plants and animals with characteristics for resistance to pests is an example of which type of pest management method?
  - A. Biological control.
  - B. Mechanical control.
  - C. Genetic control.
  - D. Physical/environmental modification.
2. Using a plow to destroy weeds is an example of which type of mechanical control method?
  - A. Exclusion.
  - B. Trapping.
  - C. Cultivation.
  - D. Irrigation.
3. Which statement is *true* about chemical control as a pest management method?
  - A. Pesticides play a key role in pest management programs and sometimes are the only control method available.
  - B. Pesticides include any material that is applied to plants and the soil but not to water or harvested crops.
  - C. A highly selective pesticide controls a wide variety of pests.
  - D. Systemic pesticides are not absorbed by treated plants or animals.
4. Which statement is *true* about pest management goals?
  - A. Pesticides are never used to prevent pests.
  - B. Preventive and suppressive pest control goals are rarely combined.
  - C. Cultivation and mowing of weeds are ways to prevent and suppress pest populations.
  - D. Over large areas, eradication is a practical approach to pest control.
5. Which term describes the pest population density that causes losses equal to the cost of control measures?
  - A. Economic threshold.
  - B. Economic injury level.
  - C. Action threshold.
  - D. Pest threshold.
6. Which would decrease the likelihood of pesticide resistance?
  - A. Increasing label dosages.
  - B. Using pesticides from the same class of chemicals.
  - C. Applying the pesticide over a wide area.
  - D. Using pesticides with multiple sites of toxicity in an organism.

7. Which federal law requires employers to provide agricultural workers and pesticide handlers with protections against possible harm from pesticides?
  - A. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
  - B. Federal Food, Drug, and Cosmetic Act (FFDCA).
  - C. Food Quality Protection Act (FQPA).
  - D. Worker Protection Standard (WPS).
8. What are the two main classifications of pesticides under FIFRA?
  - A. Organic and inorganic.
  - B. General-use and unclassified use.
  - C. Regulated and unregulated.
  - D. Unclassified use and restricted-use.
9. What is a tolerance as set by the EPA?
  - A. The maximum amount of pesticide residue that may legally remain on or in a commodity at the time of harvest or slaughter.
  - B. The maximum amount of pesticide residue that workers may be exposed to during the course of an average workday.
  - C. The minimum amount of pesticide residue that may remain on a crop during the growing season.
  - D. The minimum amount of pesticide residue that may be consumed by a 150-pound person on a yearly basis.
10. Which of the following sections under FIFRA could be used to allow the use of an unregistered pesticide to control an "emergency" pest problem?
  - A. Section 3.
  - B. Section 18.
  - C. Section 24 (c).
  - D. Section 25 (b).
11. The name "VIP No Pest 75WP" on a pesticide label indicates:
  - A. The chemical name and 75 percent inert ingredients formulated as a wettable powder.
  - B. The brand name and 25 percent active ingredients, formulated as a wettable powder.
  - C. The brand name and 75 percent active ingredients, formulated as a wettable powder.
  - D. The chemical name and 25 percent active ingredients, formulated as a wettable powder.
12. Which signal word appears on a label with a skull and crossbones symbol?
  - A. DANGER—POISON.
  - B. DANGER.
  - C. WARNING.
  - D. CAUTION.
13. Which statement is *true* about protective clothing and equipment statements?
  - A. Pesticide labels are very consistent in the type of information they contain on protective clothing and equipment.
  - B. When a respirator is required, the model is always specified on the label.
  - C. It is not necessary to follow all advice on protective clothing or equipment that appears on the label.
  - D. If a pesticide label does not specifically mention a type of protective clothing or equipment that does not rule out the need for the additional protection or equipment.
14. "This product is highly toxic to bees" is an example of which type of precautionary statement?
  - A. Acute toxicity hazard.
  - B. Environmental hazard.
  - C. Physical or chemical hazard.
  - D. Agricultural use requirement.

15. Which is *true* about REIs (restricted-entry intervals)?
  - A. The pesticide manufacturer sets REIs
  - B. The REI statement is most often listed under “Non-agricultural use requirements.”
  - C. REIs are not covered under the EPA’s Worker Protection Standard (WPS).
  - D. If there are multiple REIs on a label, the REIs are usually found at the beginning of each use section for each crop.
16. How much active ingredient is there in a 20-pound bag of Atrazine 90DF?
  - A. 4 pounds.
  - B. 9 pounds.
  - C. 18 pounds.
  - D. 20 pounds.
17. What type of pesticide formulation consists of a liquid dispersed as droplets in another liquid and may require agitation?
  - A. Microencapsulated.
  - B. Solution.
  - C. Suspension.
  - D. Emulsion.
18. Which liquid pesticide formulation contains solid particles that do not dissolve in either water or oil and may contribute to abrasive wear of nozzles and pumps?
  - A. Ultra-low volume (ULV).
  - B. Invert emulsions.
  - C. Aerosols (A).
  - D. Flowables (F)/liquids (L).
19. Which dry/solid formulation requires constant agitation and may be abrasive to pumps and nozzles and cause them to wear out quickly?
  - A. Dusts (D).
  - B. Granules (G).
  - C. Wettable powders (WP).
  - D. Soluble powders (SP).
20. Which type of dry/solid pesticide formulation is always applied dry and can easily drift to non-target sites?
  - A. Dusts.
  - B. Granules.
  - C. Pellets.
  - D. Baits.
21. What type of formulation covers either a liquid or dry pesticide particle with plastic?
  - A. Pellets.
  - B. Microencapsulates.
  - C. Water-soluble packets.
  - D. Water-dispersible granules.
22. Which statement is *true* about adjuvants?
  - A. They possess pesticidal activity.
  - B. They must be registered by the U.S. Environmental Protection Agency.
  - C. Adjuvants often increase spray application problems.
  - D. Adjuvants are either premixed in the pesticide formulation or added to the spray tank mixture.
23. Which type of adjuvant increases the adhesion of solid particles to target surfaces?
  - A. Compatibility agents.
  - B. Stickers.
  - C. Drift retardants.
  - D. Defoaming agents.
24. Which equation reflects the relationship between pesticide safety concerns?
  - A. Hazard = toxicity x exposure.
  - B. Toxicity = hazard x exposure.
  - C. Exposure = hazard x toxicity.
  - D. Hazard = exposure x risk.

25. Which statement is *true* about the LD<sub>50</sub> and LC<sub>50</sub>?
- A. The LD<sub>50</sub> and LC<sub>50</sub> measure multiple toxic effects.
  - B. The LD<sub>50</sub> and LC<sub>50</sub> translate directly to humans.
  - C. The LD<sub>50</sub> and LC<sub>50</sub> measure the potential buildup of effects due to multiple exposures.
  - D. The LD<sub>50</sub> and LC<sub>50</sub> measure acute toxicity.
26. Which signal word is associated with Hazard Class II (i.e., small to medium dose could cause death, illness, or skin, eye, or respiratory damage) and must have the Spanish word “Aviso” on the label?
- A. DANGER—POISON.
  - B. DANGER.
  - C. WARNING.
  - D. CAUTION.
27. What should be done if cholinesterase levels fall significantly below baseline?
- A. Have the pesticide handler increase the use of personal protective equipment until the cholinesterase level builds back up again to normal levels.
  - B. Remove the pesticide handler from pesticide exposure for at least one year.
  - C. Remove the pesticide handler from pesticide exposure until such time as the cholinesterase level builds back up again to normal levels.
  - D. Seek medical attention immediately for the pesticide handler and have them avoid mixing and loading pesticides for 48 hours after the last exposure.
28. What would be the first objective if dermal exposure to a pesticide has occurred?
- A. Get the victim to fresh air immediately.
  - B. Administer artificial respiration.
  - C. Rinse the pesticide off to prevent absorption.
  - D. Apply a first-aid ointment to the affected area.
29. Which statement is *true* about inducing vomiting for a victim of oral pesticide exposure?
- A. Always induce vomiting after a victim has swallowed a pesticide.
  - B. Induce vomiting with the victim lying flat on his back.
  - C. Ipecac syrup is routinely recommended to induce vomiting.
  - D. Before inducing vomiting, first give the victim at least 2 glasses of water to dilute the product.
30. What type of PPE should you wear during an application if large amounts of a pesticide could be deposited on your clothing over an extended period of time?
- A. A coverall made of a cotton-synthetic blend.
  - B. A chemical-resistant suit made of rubber or plastic.
  - C. A chemical-resistant rubber apron.
  - D. Long-sleeved shirt and long pants made of a woven cotton fabric.

31. Which is the appropriate way to wear gloves and footwear for a job in which you will be working with your arms raised some of the time and lowered some of the time?
- A. Wear gloves with your sleeves over them and put your pant legs outside your boots.
  - B. Wear gloves outside of your sleeves and wear your pant legs inside your boots.
  - C. Wear gloves with a cuff closed tightly outside the sleeve and wear your pant legs inside your boots.
  - D. Wear gloves with a cuff closed tightly outside the sleeve and wear your pant legs outside your boots.
32. Which statement is *true* about respiratory protection?
- A. Air-purifying respirators supply additional oxygen.
  - B. All respirators are approved by the EPA.
  - C. Filters are classified on the basis of oil degradation resistance and filter efficiency.
  - D. Non-powered particulate respirators use a fan to help draw air through a cartridge.
33. Which statement is *true* about replacing reusable PPE?
- A. Reusable items need to be replaced only at the end of the work season.
  - B. Gloves generally last longer than footwear, aprons, headgear, and protective suits.
  - C. Glove replacement is a high priority.
  - D. If PPE is starting to thin out, it can be reused as long as there are no holes.
34. What should you do with clothing made of cotton or polyester that has been heavily contaminated with pesticides labeled with the signal word DANGER-POISON, DANGER, or WARNING?
- A. Discard such items in a hazardous waste collection site.
  - B. Discard items with regular trash.
  - C. Launder the items separately from other clothing using two entire wash cycles.
  - D. Launder the items separately using one wash cycle, and line dry.
35. Which practice would help prevent groundwater or surface water contamination?
- A. Eliminate grass strips that are between treated fields and streams.
  - B. Store and mix herbicides around abandoned wells.
  - C. Select pesticides that tightly adsorb to soil and are not persistent.
  - D. Apply pesticides broadly over large areas.
36. Which statement is *true* about factors affecting spray drift?
- A. Ground applications usually produce more spray drift than aerial applications.
  - B. High rates of evaporation and high temperatures reduce drift.
  - C. For reducing drift potential, spraying at midday is usually best.
  - D. Spraying during temperature inversions can result in significant long-distance drift.

37. Which statement is *true* about pesticide effects on non-target organisms?
- A. Drift is one of the primary causes of damage to crops and other plants in adjacent areas.
  - B. Granular or pelleted pesticide formulations are the safest for preventing injury to birds and other animals.
  - C. Most livestock poisoning by pesticides occurs when they breathe in vapors from nearby treated fields.
  - D. Very few herbicides can cause phytotoxic injury.
38. Which items should be stored at the pesticide storage site?
- A. Food and feed.
  - B. PPE for mixing and loading and medical supplies.
  - C. Spill cleanup kit and emergency PPE.
  - D. Medication and veterinary supplies.
39. Which statement is *true* about storage of pesticide containers?
- A. You may store pesticides in bottles or jars as long as they are appropriately labeled.
  - B. Keep bags of wettable and soluble powders open, so they are exposed to the air.
  - C. Store liquid formulations and small containers of dry formulations on wood shelving.
  - D. Place bulk or mini-bulk tanks on a reinforced concrete pad or other impermeable surface.
40. What should be done with cancelled pesticide products that can no longer be legally used?
- A. Use them up by applying them at a rate greater than specified by the label.
  - B. Store them in the same area as other pesticides but mark them as outdated.
  - C. Recycle them by mixing them with other pesticide products.
  - D. Treat as hazardous waste and dispose of accordingly.
41. Which statement is *true* about potential problems from pesticide fires?
- A. Pesticides containing oils or petroleum products are the least flammable.
  - B. Vapors or smoke from pesticide fires may be harmful to animals but not to plants.
  - C. Pesticides may be flammable but never explosive.
  - D. Runoff from a pesticide fire site may contain highly toxic chemicals.
42. Which is *not* a recommended safety precaution for a pesticide storage facility?
- A. Locate storage facilities as far as possible from places where people and animals live.
  - B. Post signs that indicate combustible materials are stored at the facility.
  - C. Store glass or pressurized containers in sunlight.
  - D. Keep foam-type fire extinguishers in all storage areas.
43. Which statement is *true* about chemical incompatibility?
- A. It is not necessary to consider chemical compatibility effects when mixing a pesticide with hard water, chlorinated water, or fertilizers.
  - B. Increasing the chemical activity of two or more products mixed together is always harmful.
  - C. Chemical incompatibility occurs when the chemical activity of the mixed products is reduced.
  - D. Labels do not provide information on avoiding chemical incompatibility.



44. Which is *not* a means of preventing contamination of water sources?
- A. When filling the tank, keep the hose down in the pesticide mixture.
  - B. Use a check valve, anti-siphoning device, or backflow preventer when pumping water directly from the source into a mix tank.
  - C. Mix and load pesticides on a containment pad.
  - D. Locate mixing equipment so that leaks or spills flow away from a drain or water source.
45. Which statement is true about cleaning pesticide equipment?
- A. Always wash equipment in the same location unless you use a containment pad or tray.
  - B. There is very little risk of pesticide exposure during equipment cleanup.
  - C. It is a good idea to wait until the end of the work week before cleaning up equipment.
  - D. Sloppy cleanup practices are one of the main causes of equipment failure or malfunction.
46. Which type of pesticide application procedure would you use to apply a herbicide between the rows of crops?
- A. Broadcast application.
  - B. Band application.
  - C. Crack and crevice application.
  - D. Foliar application.
47. You are applying pesticide to a rectangular area that is 50 feet long by 20 feet wide. What is the area in square feet?
- A. 70 square feet.
  - B. 100 square feet.
  - C. 500 square feet.
  - D. 1,000 square feet.
48. You determined from a calibration test that your boom sprayer delivers 8 gallons of water over a 0.25-acre (1/4-acre) test area. You need to apply pesticide to a 10-acre field. How much spray mixture is needed for the 10-acre application area?
- A. 80 gallons.
  - B. 120 gallons.
  - C. 320 gallons.
  - D. 400 gallons.
49. From your calibration test, you determine that your backpack sprayer delivers 0.25 gallon of water to cover a 250-square-foot test area. The label recommends applying pesticide at a rate of 6 ounces of product per gallon. How many ounces of product are needed to cover a 1,000-square-foot application area?
- A. 6 ounces.
  - B. 12 ounces.
  - C. 18 ounces.
  - D. 24 ounces.
50. Which would likely be an *inappropriate* way to explain a pest control procedure to the customer?
- A. Telling the customer what you are spraying for and also showing him the problem.
  - B. Assuring the customer that he/she will receive 100 percent control after one application.
  - C. Informing the customer of post-application label instructions.
  - D. Explaining to the customer factors that have contributed to the pest problem.

## ANSWERS

1. C.	2. C.	3. A.	4. C.	5. B.	6. D.	7. D.
8. D.	9. A.	10. B.	11. C.	12. A.	13. D.	14. B.
15. D.	16. C.	17. D.	18. D.	19. C.	20. A.	21. B.
22. D.	23. B.	24. A.	25. D.	26. C.	27. C.	28. C.
29. D.	30. B.	31. D.	32. C.	33. C.	34. A.	35. C.
36. D.	37. A.	38. C.	39. D.	40. D.	41. D.	42. C.
43. C.	44. A.	45. D.	46. B.	47. D.	48. C.	49. A.
50. B.						